

Synthetics

By
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DMA Abstract

SYNTHETICS

New Works for Non-Western Percussion and Electronics

Benjamin Yats

Doctor of Musical Arts: Percussion Performance

The Doctoral Performance and Research submitted by Benjamin Yats, under the direction of Dr. Anthony Di Sanza at the University of Wisconsin-Madison, in the fulfillment of the requirements for the degree of Doctor of Musical Arts consisting of the following:

I. Recording Project

“Synthetics: Improvisations for Non-Western Percussion and Electronics”

This recording project consists of five commissioned works by composer Ryan Elvert. It includes electronic backing tracks for all five pieces, and scores for three of the pieces. All video and audio was recorded in River City Studios in Grand Rapids, Michigan. The five commissioned pieces are:

Birdlore

mridangam and kanjira

Teibíocht

bodhrán

Water and Coffee

tabla and mbira

Cage's Internal

maracas

Michizonaradosconsisota

o-daiko and hand drum Set

II. Written Project

“Synthetics: A Performance Guide”

To accompany the recording project, this written project serves as a performance guide for the commissioned pieces. It includes the *inspirations* behind each piece, the *instrumentation* and suggested substitutions, *performance suggestions* that include my approach to improvisation and techniques used, and the links to the *recordings* as well as my description of each recording.

III. Solo Recital, 12/12/2020, Mills Concert Hall

Tabla Solo in Teen Taal

Regarding X (Gamelan Improvisation)

IV. Solo/Chamber Recital, April 30th, 2021, Music Hall

Headed Mounted Sideways - Vola

Not everything which happens is in the newspaper - Fredrik Andersson

Van Gogh From Space - Steven Snowden

Knotts, for speaking Percussionist - Jay C. Batzner

Dusting the Connecting Link - David Hollinden

Garden in the Bones - Periphery

V: Solo Recital/Chamber, 12/15/2022, Collins Recital Hall

Indian Classical Set:

Mridangam Solo in Adhi Taalim - Sam Jeyasingham

Tabla Solo in Teen Taal

Drum Kit Set:

Law - Richard Spaven

The Self - Richard Spaven

Spin - Richard Spaven

Jazz Vibes Set:

Christmas Time is Here - Vince Guaraldi

'Til There Was You - Meredith Wilson

Bye Bye Blackbird - Ray Henderson

Irish Trad Set, with Lillies of the Midwest

Jigs

Reels

VI: Solo Recital/Chamber, 12/9/2023, Humanities Room 1341

Desert Dances - Ryan Elvert

Violin Sonata no. 1 in G minor BWV 1001, Presto- J.S Bach

Softly and Tenderly Jesus is Calling - David Gillingham

Teibíocht - Ryan Elvert

buttonwood - Evan Chapman

VII: Lecture Recital, May 11th, 2024, Pretty Lake, Dousman WI.

“Synthetics: New Works for Non-Western Percussion and Electronics”

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Acknowledgments

I tried, in vain, to encompass everyone who has made this journey through academia possible for me. However, here is my best attempt.

I first must thank my wife for journeying across the country with me, and for allowing me to chase my dreams. I thank my parents and siblings for believing in me while they came to some bizarre performances (negative tap dancing and an amplified cactus stand out as uniquely bizarre to them, I'm sure), and may have questioned my musical pursuits. I simply have too many friends, musical and non-musical, to include in this page. Know that you have all changed my life in innumerable ways. I also have far too many teachers to thank for shaping me into the musician and educator that I am today. From my first days in band, to my graduate studies, and likely for the rest of my life, your influence and guidance has and will be priceless.

Thanks to my DPRC panel at UW-Madison, who have had immeasurable patience with me as I bumbled through the final stages of this degree. While they are all incredibly busy with their own careers, they found the time to watch my recitals, give critique, and see me across this finish line. Thank you.

Ryan Elvert - I've worked with you and your music more than I even care to admit! I've been honored to go on tour with your Dance Suite, but also honored to play on your Ballet, Quartets, Solos, Duos, and now, an album of new music. Not bad for two Michigan kids. Thanks, good buddy.

Mike List - Thanks for getting me wrapped up in hand drumming. Without you, it is easy to say I would not have the breadth of passions I now have. Tabla wouldn't have existed for me, which led me to mridangam, to maracas, to Irish Trad, etc. I blame you for all of my wild interests. Thanks, Mike.

Dr. Andrew Spencer - I earned both my Bachelors and Masters degree from Doc. I have no idea what he saw in a small town kid who wanted to go to school for music, but he saw something in me that I was unaware of. You taught me that music was so much more than what I knew it to be, and instilled in me the belief that "Music Makes Life More Beautiful." My formative years at Central Michigan were incalculably beautiful, and I know that CMU was the perfect place for me. Sticks are cold in the case, Kill it Before it Multiplies, and Fire Up Forever. Thanks, Doc.

John Kinzie - While our time in Denver was brief, you quite literally opened the door for me to get my Orchestral Percussionist chops going. I had never played more excerpts or gigged in so many regional orchestras as I did when I was in Colorado. You taught me that there is a balance between digging into the minutia of orchestral excerpts, but also to "just play the music" and not overthink everything. Thanks, John.

Dr. Anthony Di Sanza - Your patience and enthusiasm have no limit. You dealt with the brunt of my burnout in my musical journey, and somehow still believed that I could finish this degree, even in times that I wasn't sure I could. I'm certain I left you with many moments that added to the stress you already manage, but your continued drive to teach so many students and perform at such a high level is an inspiration to everyone who has the pleasure of knowing you. I know that UW-Madison is the only place I would want to earn my DMA from. Thanks, Tony.

Chapter 1

About the Composer

Ryan Elvert is a dear friend and colleague. We met while working on degrees at Central Michigan University, and have continued to work together ever since. Elvert studied both percussion and composition at Central Michigan, which gave him a unique perspective as a hybrid performer and composer. He has written music that ranges from marimba solos with electronics, a ballet, percussion quartets, marimba concertos, and a plethora of non-percussion music. His influence on his friends and colleagues is without comparison. Musicians have traveled back to Michigan from Arizona and Colorado to perform his music. I have personally commissioned several works from him, as have many others.

When asked about his influences as a composer, Elvert stated that:

“My artistic inspirations come from a combination of natural phenomena and classic literature. In that, I try not to write to portray an image as much as I try to portray an emotion. I have always felt aligned with the music of minimalist composers, where the music is not meant to paint a picture but to emphasize the shape of the music itself. In this half of my life I am drawing from a lot of mythical and religious imagery to create a feeling of space that encompasses the headspace I was in when reading. I also have the same approach when using the aesthetics of nature.”¹

¹Ryan Elvert, interview by Ben Yats, September 7th, 2024.

Purpose of the Project

The purpose behind this project is to create five new original works for non-Western percussion and electronics. We selected instruments less represented in Western percussion literature that provide an avenue for performers at varying skill levels to explore each instrument's expressive range. We did this while remaining cognizant of relevant cultural traditions.

Composer Ryan Elvert was tasked with creating the electronic backing tracks and respective scores, and I was tasked with giving him parameters (if any) for each piece, as well as learning and creating my own parts to the music. To assist in the understanding of these new works, I also created this accompanying document as a performance guide to these pieces, including various substitutions, how I approached instrumental technique, improvisation, and more.

Chapter 2

Birdlore

Inspiration

Elvert is no stranger to bird watching, and the assortment of birds he sees in his backyard are what influenced *Birdlore*. He selected several birds he heard singing and used their songs to form the entirety of the piece. It is a simple concept, but one that proves inspiration can come from the simplest places to create the most beautiful music.

I was immediately struck by how the graphic score looks strikingly similar to a walking path through the woods. I was moved to pick up dry leaves and sticks from the backyard to mimic the sound of my walking through the woods - crunching with each step as I meandered deeper into the trees. This event occurs only at the start of the piece and does not return. To me, this indicates some sort of departure with no obvious return.

The inclusion of wind chimes calls back to my childhood home and also my grandmother's house. Here, the sounds of varying sizes of wind chimes could be enjoyed on the front porch while bird watching and heard off in the distance as I traversed the wooded property behind both houses. I opted to use the combination of a particular wind chime and the "crunching leaves" sounds to signal my departure from the front porch, utilizing them sparingly between events as the piece unfolds. At the end of the piece, a single wind chime sounds after the final crow call, alluding to the memory of initial departure.

Instrumentation

The instrumentation I selected for this piece began with mridangam and kanjira. These are instruments from South India, and I had the pleasure of studying them with my teacher Sam Jeyasingham. He used both while playing either Indian classical, or accompanying dancers. The mridangam is a barrel-shaped drum with a drum head on either side of the instrument (Figure 1). One of these heads acts as a lower-tuned bass voice (Figure 3), while the other is higher in range and often tuned to a specific pitch. The higher-pitched head is capable of a variety of resonant and non-resonant sounds (Figure 2). The dominant hand plays the higher-pitched side, while the left remains on the lower-pitched side.



Figure 1



Figure 2



Figure 3

The kanjira (Figure 4) is a single-headed drum, held upright in one hand and struck with the other. The single drum head is made of various natural animal skins or synthetic material and is manipulated by squeezing the head to bend the pitch up or down. It has a single jingle set to add

articulation. My drum head in particular is made of monitor lizard skin, and was gifted to me by Sam.



Figure 4

In addition to the mridangam and kanjira, I was moved to include pre-made bird calls, leaves, branches, and wind chimes in the piece. These were not explicitly listed as instruments for Elvert while he was composing the audio track for *Birdlore*, but I found it gave an even greater personal touch to my improvisation. This also highlights Elvert's willingness to let each performer create a truly personal and unique realization of the piece. In addition, I was moved to imitate a black-capped chickadee and a cardinal by whistling during the piece. I also used a hand held crow call and barred owl call that were purchased at local sporting goods stores, and typically used for hunting.

Performance Suggestions

Realizing The Score

Elvert created this piece by inserting different bird calls in Logic Pro X. He then processed and altered their sounds through various techniques such as additional reverb, pitch

alterations, playback speed, delays, etc. As noted in appendix A, he opted to create a graphic score for *Birdlore*, which consequently influenced how I perceived the piece. The score highlights five different birds that can all be found in Michigan, our home state. They include the robin, red wing blackbird, blue jay, crow, and starling. He lays out each specific bird in the order it appears, and with specific time markings to help guide the performer either in their memorization of the piece, or in performance (for example, the synth pad starts at :23 seconds, the blue jay begins singing at 2:05, etc).

The score doesn't give any guidance apart from the time stamps of specific birds and a few other notes. I would practice with a stop watch on my phone while watching the playback timer on the track so I know when a new bird call was going to sound. Practicing with the stopwatch helped me memorize the timing of events, facilitating less reliance on the score for greater artistic freedom. Additionally, having these fixed time stamps for events gave me landing points that I try to lead my improvisation towards so that I'm not aimlessly improvising with disregard for the track. However, other performers are encouraged to add their own notes to the score to facilitate their own realization of the piece, either in practice or performance. For example, a performer could choose to pencil in "switch to mridangam" at the time stamp of 3:45, or they could pencil in "strike wind chime at 2:17."

Techniques Used

Kanjira Techniques

The majority of my playing techniques on kanjira utilize a split hand technique common in Indian Classical and Folk music. The split hand technique is applied in various beating spots on the surface, creating a variety of timbres.

Mridangam Techniques

The mridangam has more specific techniques than kanjira, and the basics of the fundamental techniques are listed below.

-Ke: right hand, dead stroke with three fingers

-Te: right hand, dead stroke with one finger

-Nam: right hand, finger pivots on head, index finger strikes edge of drum

-Thim: right hand, finger pivots on head, index finger strikes edge of black spot

-Dim: right hand, full hand plays flat and rebounds for resonance

-Ta: left hand, dead stroke

-Thom: left hand, rebounds for resonance

Improvisation

When I perform this piece, there are a mixture of fixed and improvisational elements. The score and backing track are obviously fixed; they are the same every time someone performs the piece. However, one of the most crucial improvisation elements in *Birdlore* is the lack of tempo in the backing track. This gives me complete temporal freedom when improvising. I am able to play any idea at any speed, fluctuate between speeds, or place any instrument at any moment within the performance, and it will not conflict with the composers intentions. This gives me total freedom in my improvisation, but I wanted to create some boundaries for myself.

My improvisational ideas appear as fragments of varying length. These fragments are shorter in length when they begin and are developed as the piece continues. This is one of the typical ways I enjoy improvisation. Beginning with fewer notes allows me to explore more manageably-sized idea fragments. Once I have found a particular idea that is applicable in the current performance, it is much simpler to expand upon it instead of trying to elaborate on an already continuous stream of notes. Once I have a collection of these improvisational fragments and expansions, they naturally combine into longer phrases. It is somewhat similar to how I would describe writing a story. The letters are connected to form words. The words are strung together to create sentences. Those sentences are connected to create prose or paragraphs, which ultimately lead to a longer narrative.

The Recording²

I begin the piece with sporadic use of wind chimes to harken back to sitting on my childhood front porch, listening to the organic melodies created by the chimes and birds. I almost immediately introduce the dried leaves and branches to indicate that I've left the familiarity of my porch and have wandered off, perhaps walking into the woods behind the house. To avoid creating an unintentional rustling of leaves, I hold onto them before the piece starts so I don't have to pick them up. At 1:43, I begin my improvisation on the kanjira while standing up. I could have just as easily sat down to make the eventual transition to mridangam more efficient, but I believe the visual element of standing while performing gives the impression that I'm walking somewhere, indicating my wandering through the forest hearing these birds.

I continue to place wind chimes between the short fragments of kanjira and introduce more rapid patterns at 2:17 while still keeping my improvisations short, until at 2:49 I introduce the hidden crow call in my pocket. This decision is an example of a somewhat fixed event that happens between when I hear the rustling of leaves at the 2:30 mark, which alerts me to the upcoming introduction of the crow at 3:58 in the track. By doing this, my intent is to feel like I am trying to illicit a reaction from the crows by calling out to them prior to their voices appearing. While there is no specific pattern to my calling, the placement of my call is a fixed element to my improvisation.

From 3:07-3:46 I begin stringing together the improvisational fragments I had been exploring on the kanjira in combination with stronger accents and faster rhythms. These all lead to my imitation of a black-capped chickadee by attempting to reproduce one of their calls by

² Youtube recording: <https://www.youtube.com/watch?v=onhqNMAW0Ko&feature=youtu.be>

whistling. I use this as a technique to fill dead space while I am transitioning to playing the mridangam, which necessitates that I sit on the ground. It is important to also note that Elvert has manipulated bird sounds from the backing track to imitate other birds that are not listed in the score. One of these birds is the “seagull” that can be heard at the 3:50 mark. This illusion was achieved by manipulating the crow sound, just like the “owl” hoot that is heard at 4:02. I try to highlight the “seagull” by ending my kanjira improvisation before it is heard, so that it is not hidden by any of my more involved and bombastic improvisations.

I now wait for two events to occur before playing the mridangam at 4:38 - the crow calls that have now responded in my previous calling, and the addition of the “owl” hoot. I find it appropriate to respond to the illusion of the owl call with an actual owl call, in this case, my best attempt at a barred owl and their trademark “who cooks for you?” cadence. Before continuing the mridangam improvisation, I allude once again back to the porch wind chimes. Here, I opt to take a slower approach to the beginning of my improvising, punctuated with my attempt to imitate a male cardinal at 5:25. This was not a planned event at all, but rather, a truly organic idea that occurred to me. After the initial whistling, I wanted to tie the cardinal call into my performance by whistling in unison with my drum improvisation. I build in intensity throughout the entirety of the mridangam improvisation until 6:39, where I begin adding more space to wind down towards the ending cadence - a crow call that occurs after the surrounding electronics have faded away. A deeply personal piece to me, I suggest other performers seek their own narrative and meaning when they approach this or any other piece. I find creating a story gives my performances a more structured path and I encourage unique stories to be told by other performers.

Chapter 3

Tebíocht

Inspiration

Inspiration for *Teibíocht* came from my love for the Irish bodhrán. I began playing this instrument in 2019, when living in Colorado. I started out by borrowing a friend's drum and visiting the local Irish Trad Sessions at Patrick's Pub in Greeley. The communal atmosphere of everyone sitting around a table immediately made me feel as if I were part of the music even when I wasn't playing. While not necessarily improvised, the act of someone simply beginning a piece on their own and watching to see how all the other players could jump right in made each piece of music feel incredibly organic. While the performers obviously had memorized the different tunes, the lack of sheet music also feels more "open" to me, allowing more visual connection between the musicians.

I knew I wanted to keep exploring this incredible drum. I also knew I wouldn't always have immediate access to a group of Irish trad musicians. My love of this new music and Elvert's love for synthesizers brought about the genesis of this piece. The only information I gave him was "I want a solo piece for bodhrán and electronics" and he was more than happy to oblige.

Instrumentation

The bodhrán was once associated with folk rituals and Saint Stephen's day. It is now widely used in Irish Traditional music.³ While not necessarily common in the United States, they are widely available and easily purchased from various manufacturers. They come in a variety of sizes, with my personal drum being a "middle of the road" dimension where it is not too deep nor too small in diameter (my particular drum is 16 inches in diameter and 5 inches deep). Other drums may have a deeper shell or a larger/smaller diameter depending on the preference of each musician. To strike the drum, I use a hard wooden stick or a Vic Firth Hot Rod, which is essentially a handful of barbecue skewers wrapped together. I chose to cut off half of the length of the Hot Rod and used sandpaper to round the edges to keep them from scratching the drum head.



Figure 5, Bodhrán Front.



Figure 6, Wooden Stick

³ Mícheál O Súilleabháin, Sandra Joyce, and Niall Keegan. "Bodhrán." *Grove Music Online*. 2001; Accessed 4 Nov. 2024. <https://www-oxfordmusiconline-com.ezproxy.library.wisc.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000048433>.



Figure 7, Bodhrán Side

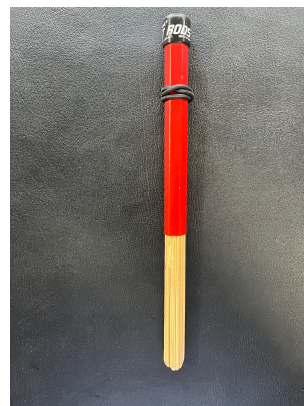


Figure 8, Hot Rod

Substitutions

If the performer is unable to obtain a bodhrán, I suggest alternative frame drums as suitable substitutes. A tar, daff, etc. could be used, but I suggest finding an instrument that does not have a cross bar, strings, rings, etc. inside the drum. This is because one of the fundamental techniques I use requires the performer to move their hand around the inside of the drum on the drum head to manipulate pitch.

Performance Suggestions

Realizing the Score

The score to *Teibíocht* contains no written rhythms, dynamics, or any other information outside of the framework of the changing time signatures that go along with the electronic backing track. This approach requires the performer to become deeply familiar the electronic track to help shape their own vision of the piece. While this may prove to be somewhat of a

barrier for unexperienced performers, I have suggestions based on how I realized the music, which will hopefully make it more approachable.

The first step of understanding the score is knowing what the backing track is doing, and when it happens. The track begins with an ostinato pattern in Figure 9 below.



Figure 9

When events in the track deviate from the above ostinato or surrounding textures, it is crucial for me to mark them in the score. When beginning to listen to this piece, I strongly suggest that performers do not play along with their instrument, but instead spend time finding these moments and meticulously adding their own time stamps and notes to the printed music. By adding unique dynamic markings, time stamps, phrases, etc to the score, performers are able to create their own individualized performances of *Teibíocht*.

Fixed Elements in the Score

In addition to the aforementioned time stamps, I use specific shorthand ways to remind myself of not just when, but what I want to play during specific moments. This allows me to have moments in the piece that are consistent each time it is performed, as opposed to being entirely improvisational.

As shown in appendix B2 and B3, I take the liberty of adding in various handwritten reminders for myself throughout the piece. These include pitch bending, rhythmic unisons with the track, implement changes, dynamics, etc. I suggest that performers find their own way to add individual touches to the piece, but I will give examples as to my own approach.

One of the first challenges to overcome is the sticking used while playing bodhrán. The basic stroke types are down (stick moves away from the body) and up (stick moves towards the body), which are played with a single hand. This means, if I want certain emphasis or accents, which are easier to facilitate with a down stroke, I need to plan my stickings accordingly, as seen in appendix B2, measures four and five. These are illustrated by arrows pointing either down (to indicate a downstroke) or up (to indicate an upstroke).

You can see several other shorthand notations in the appendix B2 and B3. I've indicated "Clock In" to highlight that the specific event of the metronomic "clock ticking" begins in measure 4, as well as a descending arrow moving from left to right. This arrow indicates the sliding pitch bend that is produced by adding pressure to the back of the drum head with the side of my hand, and then gradually sliding it down to manipulate the pitch to move from higher to lower.

Specific rhythmic events are notated above the staff in several ways. One way is to write out the specific rhythm, as seen in mm. 17. Here, we also see my notation to indicate a more resonant sound on the drum, achieved by taking as much of the hand off of the drum head as possible. This is notated by the open note head on beat five in mm. 17.

I eventually wanted to use even more compact shorthand notations in the later stages of the piece. Fragments of the main theme occur in two variations between mm.117-136. To save

In the piece, I also use a clave instead of my thumb to bend the pitch of the drum. I find that using a clave allows the drum to resonate more, which creates a clearer and more effective pitch bend.

I prefer to use a stick to perform *Teibíocht*, as I feel it gives a more defined and clear articulation for how I hear the piece in my mind. However, it would be appropriate for a performer to use their hands instead of a stick. This would open the door for more frame drum techniques instead of the bodhrán techniques that would require a stick.

Improvisation

My Improvisation in this piece is somewhat limited when compared to *Birdlore*, and mainly revolves around keeping consistent time while adding ornamentations. Here, I write the phrase “*time*” above several measures, (mm.54, for example) which I use to indicate more consistent 16th notes. For my own playing of “*time*,” I often revert back to the pattern written above mm. 5. This is a loose guideline and I often add ornamentation during these sections to create contrast and interest. However, these moments still retain the function of keeping steady time, which is typical to how I would accompany other instrumentalists when playing bodhrán. An example of how I would place an ornament while keeping time could look like:



Figure 12

I additionally experiment by adding additional accents or by using the aforementioned technique of manipulating the pitch and resonance of the drum head. While there are fixed

moments where I specifically want a pitch change to go a certain direction, the majority of these are improvised. My approach in *Teibíocht* is not to improvise by creating vastly contrasting rhythms and a multitude of idea fragments, as I did in *Birdlore*. Rather, it is to improvise mostly through changes in timbre, accents, and color, while maintaining a steady sense of pulse.

The Recording⁴

Every performance I have had so far begins with me resting until measure 4, so that the audience can hear the main theme uninterrupted. I don't add much variation to my accent pattern until measure 18, and even then, I do not stray from the basic 16th-note pattern. It is often tempting to come right out of the gate with more difficult techniques, but I feel it is essential to allow the improvisation to unfold organically. Showing your entire hand to an audience early leaves you without much room to expand upon musical ideas and techniques.

To help highlight the significance of the unison hits with the backing track in measure 53, I find it effective to diminuendo into muffled quarter notes for two measures prior to the event. I play the exact rhythm as it occurs in the backing track, which is essentially the main theme from the beginning of the piece, but now with two additional sixteenth notes at the end.



Figure 13

I then alternate between playing time and unison hits until measure 73. While still playing time, I now add the triple stroke that utilizes back sticking.

⁴ Youtube recording: <https://youtu.be/jgy40uHqzqc>

The track builds in intensity from measures 93-97, where Elvert drastically changes the direction of the piece. While there is still a sense of strict pulse in the track, it has now opened up into a much more ethereal and astral sounding section. Here, I switch to a harder stick for better articulation and a clave to manipulate the pitch on the back of the drum. The heavy stick with the addition of the clave work in tandem to create clearer pitch bends as opposed to when I use the Hot Rod stick and my hand, which I used at the start of the recording. In this section, while I do lightly improvise with the track, my main focus is to line up with as many of the events that occur as possible until measure 135. As mentioned in the shorthand notation section, there are only two specific rhythms based off of the main theme I needed to memorize for this section (see appendix B3).

Elvert then takes the main theme, shortens it by removing the last sixteenth note, and uses this new rhythm as a transition tool to build into measure 142 where the track abruptly changes. From measures 144 until the end of the piece, I pull out the stops with changing rhythms, pitch bending, muting the drum, etc. There are several different events I need to catch in the track, which are indicated in measures 151, 163, and 168, pushing my improvisation and technique to the limit. I line up the end of the track with a triple stroke roll that crescendos until a final note.

Chapter 4

Water and Coffee

Inspiration

Most people, not just musicians, are often working on multiple projects at the same time. For my own career path as a musician, I have gradually learned that I can't wait to be inspired by some external or internal force to work towards creating art. This will undoubtedly lead to projects not being finished on time. While I can't speak for all of the creative processes Elvert believes in, I do know *Water and Coffee* was not named after or created with a grand vision or muse in mind. In conversation with the composer, I was told that while he was working on this piece, he was drinking water and coffee at the time, hence the title.

Regarding my own Inspiration, *Water and Coffee* was the first piece that I commissioned from Elvert and was performed at a Midwest Special Services event. I wasn't necessarily inspired by a thought or emotion, but I was motivated by Elvert's use of synthesizers and how his music has changed over time to reflect his use of technology. Based on these interests, I asked for an atmospheric track with an underlying pulse; *Water and Coffee* was created.

Instrumentation

The debut performance of this piece included a collection of instruments that ultimately did not make it into the recording of the piece. When I performed at Midwest Special Services, I used several different sets of tabla, bodhrán, darbuka, riq, pandeiro, tambourine, cajon, and two different frame drums. When I performed the piece during my lecture recital, I opted to minimize my set up to only my collection of tabla, but added a melodic component: an mbira. In this

performance, I arranged the drums around me in a semi-circle. Ultimately for the recording, I continued to use this instrumentation, but arranged the tabla so that all of the higher-pitched drums were on my right-hand side, with the lower-pitched drum on my left.



Figure 14



Figure 15

Substitutions

The mbira I use is known as the mbira dzavadzimu from the Shona people in Zimbabwe.⁵ It consists of 24 keys, tuned to a G Mixolydian scale. It is not an instrument that is typically owned by many percussionists, and I suggest that if it is difficult to find or purchase this specific type of mbira, a performer could substitute any sort of kalimba or “finger piano.” In fact, a performer could go as far as to play any sort of melodic instrument, given the available

⁵ Tracey, Andrew. "Deza." *Grove Music Online*. 22 Sep. 2015; Accessed 4 Nov. 2024. <https://www-oxfordmusiconline-com.ezproxy.library.wisc.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-4002285584>.

resources. A toy piano would be grand, a set of desk bells could suffice, or a small glockenspiel could also function as a melodic element in lieu of a niche mbira.

As an alternative to owning multiple sets of tabla, performers can substitute a multitude of different instruments into this piece and still create a very convincing work of art. To try and encompass the resonance of the tabla, I suggest several options that another performer could consider: flower pots, metal mixing bowls, or ceramic bowls. When placed normally with their rims upwards, each of these instruments can create a resonant sound capable of creating melodies when strung together. When turned over and played upside down on a piece of foam, carpet, etc, they are capable of creating a more articulate sound, which is another fundamental timbre in tabla playing.

Performance Suggestions

Realizing the Score

This is a piece with no written notation whatsoever. Once the final backing track was finished, all I received was the file to play along with. At first, I was somewhat taken aback by the total lack of notation to guide my preparation of the piece. However, I realized that my perception of the piece would be completely influenced by how I approached the backing track, and with a blank slate I took to jotting down notes of what I heard on the track. This is similar to *Teibíocht*, in the use of time stamps to help find specific events or to use as a practice guide to find specific sections. In this way, I created a road map of the specific time event occurrences, indicating how long these sections lasted, what I heard during these sections, what I wanted to

play, or fully written out ideas if I wanted a more specific structure for improvisation. To ensure that I was lined up with these time stamps, I used a stopwatch on my phone.

This sort of approach also opens the door for performers who might not read standard Western musical notation, but still want to perform this piece. The road map I used for myself was handwritten on scrap paper, but the typical structure I used (depending on which performance it was) would appear on my notes as:

-Intro until 1:45. Give Space.
 -Build @ 1:47, New Voice enters
 -2:18 Drop Dynamics
 -2:30, New String Pad
 -3:15-3:27. Diminuendo

-No Time
 -(Pick Up Mbira)

-4:44. New Voice - In Time
 -“explore” until 6:37, then -Diminuendo
 -6:45. Strict Time. Kherherwa.
 -7:22. Hits on Downbeats
 -Fast Diminuendo @ 8:00

Techniques

There are several key techniques that I use while playing the tabla in this piece. They are quite similar to the techniques used on the mridangam. I have grouped them into the two drums that make up a set of tabla, the daya (high drum) and baya (low drum). A list of tabla techniques is below:

Daya

- Tete 1: Dead stroke in center of drum with middle, ring, and pinky finger
- Tete 2: Dead stroke in center of drum with index finger
- Na: Resonant stroke with index finger on outer ring of drum head

- Tin: Resonant stroke with index finger on inner ring of drum head
- Tun: Full stroke with either full hand or index finger, strikes center of drum

Baya

- Ge 1: Resonant stroke with middle and ring finger on inner ring of drum
- Ge 2: Resonant stroke with index finger on inner ring of drum
- Ke: Dead stroke with full hand, flat on drum.

My mbira playing does not necessarily have a great deal of technique and what I know I have learned through various lessons, YouTube recordings, and an educational book by B. Michael Williams, titled “Learning Mbira, A Beginning.”⁶ The left thumb is responsible for all of the large keys in the double-sided row on the left side of the mbira. The right thumb plays the first three keys on the right side, and the right index finger plays the remaining seven keys from underneath the instrument. For visual aid, I have labeled these sections in the image below with specific color markings in appendix C.

Blue Lines: fifteen keys with blue lines are played by the left hand thumbnail.

Red Lines: The three keys with red lines are played with the right hand thumbnail.

Yellow Lines: The six keys with yellow lines are played from underneath by the right index fingernail.

Improvisation

This specific piece allows me to improvise with an element that the rest of the album does not contain - melody. The tabla are loosely tuned to match the pitches I hear in the backing track, or to specifically add dissonance against the backing track. This allows me to improvise on

⁶ B. Michael Williams, *Learning Mbira, A Beginning...*(HoneyRock)., 2001

melodic ideas that I may be hearing during each performance, or to explore ones that surprise me and that I want to incorporate.

The mbira I own is tuned to a specific key/scale - G mixolydian. This essentially means that a G major scale, with pitches G-A-B-C-D-E-F#-G, changes slightly by lowering the 7th scale degree, F#. The scale then contains the pitches G-A-B-C-D-E-F-G. The layout of my instrument's keys and their respective pitches was also crucial to memorize prior to trying to improvise on them. I utilized B. Michael Williams book to help memorize the layout of the mbira keys. While I absolutely love the element of chance in my own improvisation, I find it important to know what pitches I'm using and where they reside, so that I can create harmonic progressions or melodies that lead the piece in different directions.

The Recording⁷

In my recording I explore the Introduction Section (0:00-1:45) on the tabla, omitting the baya (bass voice in a tabla set) until I lead into the "*building*" event at 1:47. Before 1:47, I begin building the rhythmic intensity of my improvisation with the addition of the non-resonant stroke techniques in my right hand; this is done to increase the rhythmic intensity before a quick diminuendo before 2:18. In addition to lowering my dynamics at 2:18, I also reduce the speed and amount of notes played to lead the listener into a briefly quieter moment.

Before the diminuendo event occurs between 3:15-3:27, I allude back to the previous idea of playing fewer notes and being less busy on the instruments. I achieve this in more exaggerated detail beginning at 3:00 by performing a single type of stroke on a single drum, and rapidly

⁷ Youtube recording: <https://www.youtube.com/watch?v=gsCIo3EERdM>

slowing down until I'm not playing in strict time with the track anymore, and then continuing the ritardando between various other drums until dropping out completely.

At 3:15, the backing track has all but lost any sense of strict time and floats into an ethereal realm. Here, I suggest the performer mirror the sudden lack of underlying rhythm by switching to a more melodic and free-flowing space in their improvisation. For myself this means switching back to mbira. I use one of my favorite improvisation tactics - starting with small fragments of ideas and then gradually elaborating upon them. I use a narrower range of notes to allow space to exist between the different ideas I'm exploring, typically ending with a cadence on the lowest G key. I try to utilize repetition to help draw the listeners ear to a particular melody I enjoy, such as at 4:12-4:30, where I use the same rhythmic idea with slight melodic alterations. From here a more constant stream of notes builds on itself until 5:30. This is where I begin to deconstruct my improvisatory fragments into smaller pieces, leading back to playing in strict time at 6:45. I end with a cadence on the lowest note of the mbira with a three note repetition.

A new dance-like rhythm begins at 6:45, which I want to accompany with a higher pitched drum. While not being notated, I wrote out my perception of the ostinato below.



Figure 16

I have to quickly remove the mbira, grab a smaller sized tabla, and switch it with the original one I have placed in front of me. This higher pitched tabla gives me a clearer articulation than the larger lower-pitched predecessor. I accompany this dancing ostinato with busier patterns that at times highlight the pattern, and at times adds rhythmic tension by not strictly following the pattern. I need to be aware of the sudden ending of the piece, which occurs almost instantly at the 8:00 minute mark.

Chapter 5

Cage's Internal

Inspiration

Elvert's inspiration for this piece comes from his love for the music of late American composer John Cage. Cage's experimentation with prepared piano, chance music, dance, percussion, and use of silence had an incredible influence on pushing the boundaries of avant garde music,⁸ as well as Elvert's appetite to experiment in his own compositions. Elvert uses text from one of his favorite Cage quotes to base the rhythms of the piece off of, with that text being:

“I can't understand why people are frightened of new ideas. I'm frightened of the old ones.”⁹

Elvert took to Morse code to write the rhythms of this piece based off of the above quote but took the two instances of the word “frightened,” and changed them to “afraid,” to modify the resulting rhythms. My own inspiration for the piece came from my love of playing maracas, specifically with some of the techniques used in Venezuelan maraca playing. I find these techniques to be stunningly virtuosic and mesmerizing to watch, and wanted to copy some of these techniques as best as I could. I use this piece as a template for practicing and performing maraca improvisations.

⁸ James Pritchett, Laura Kuhn, and Charles Hiroshi Garrett. "Cage, John." *Grove Music Online*. 10 Jul. 2012; Accessed 28 Oct. 2024. <https://www-oxfordmusiconline-com.ezproxy.library.wisc.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-1002223954>.

⁹ Joshua Figueroa. "The Curious Case of John Cage's Slouch Hat." KMFA 89.5 November 29th, 2018. Accessed 4 November, 2024. <https://www.kmfa.org/pages/2968>

Instrumentation

The only instrumentation given to Elvert for this piece was maracas, specifically, Venezuelan maracas that have a specific shape and function to them. These maracas are found in the plains between Colombia and Venezuela, and are typically built with native gourds and seeds.¹⁰ While these maracas are not particularly difficult to find in the United State, I want to give performers options who may not have the ability to acquire them.

For my recording of the piece, I used two sets of Venezuelan maracas. One set is drier, with greater articulation, and the other has smaller sized beads, which creates a smoother, more legato sound. I also love working with whatever circumstances occur in performances, so I searched the recording studio (River City Studios, in Grand Rapids, MI) and found a cheap wooden maraca with almost no beads, and a shaker shaped like a cucumber which had an even more legato timbre than my expensive maracas! These proved incredibly useful at allowing me to use additional timbres that I had previously not considered.



Figure 17

¹⁰ Manuel Rangel, *Five Movements are the Key: Venezuelan Maraca Method, Caracas, Venezuela 2017*.

Substitutions

I recommend that performers use any and all maracas or shakers they own to perform this piece. Many of the techniques used in Venezuelan maraca playing are transferrable to egg shakers, plastic maracas, or a metal can filled with dried rice or beans. While maracas and shakers of any sort are appropriate, I do not recommend using other sorts of percussion for this piece. While I am usually flexible in terms of instrumentation, the connection between the articulation of the maracas/shakers and the Morse code inspiration is hard to ignore, and I feel the spirit of the piece is somewhat lacking without this combination.

Performance Suggestions

Realizing the Score

Elvert created two different scores for this piece. The primary score looks shockingly similar to the score of *Teibíocht*, as it consists of nothing other than blank measures with time signatures. This is referred to as “Cage’s Internal Map.” The second score is a combination of all the rhythms resulting from Morse code, which Elvert lays out in two sections as rhythmic examples that occur in the piece. The first section, Section A, contains the rhythms resulting from the text “I can’t understand why people are afraid of new ideas.” The second section, Section B, contains the rhythms resulting from “I’m afraid of the old ones.’ When asked about these two specific scores, Elvert stated that:

“The Cages Internal rhythmic examples are the translations from Morse code. Taking the quote from John Cage, ‘I don’t know why people are terrified of news ideas. I’m terrified of the old ones,’ I wrote it out in Morse code and then listened to each word to isolate the rhythm and articulations. This provided the base content for the backing track. The reasons these are important to the performer, and included for learning the piece, is that it allows them to integrate their improvisations into the back track to create a, hopefully, seamless weave of ideas.¹¹”

With this in mind as I prepared the piece, I had to once again rely on listening intently to the track and discovering when certain events occurred in the piece, as well as which of the rhythmic examples fit with each event. To make this simpler for myself, I notated specific rhythmic examples as being Pattern A, Pattern B, Pattern C, or D. When I wanted to play that specific rhythm with the track, I would notate the respective pattern over the measure with the letter surrounded by brackets (see appendix D). I also kept track of the metronomic opening motive (see below) in the track by placing small vertical lines above when I needed to know when it was to occur.

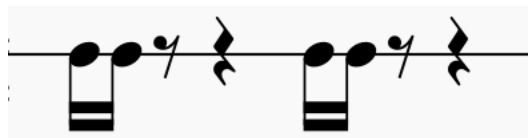


Figure 18

¹¹ Ryan Elvert, interviewed by Ben Yats, September 15, 2024.

To save myself time rewinding and searching for specific sections, I used time stamps in the piece to help indicate where events would occur. Other realizations are similar to previous pieces — I write specific events such as a crescendo into a roll at measure 99, specific beats in measures where I need a clearer picture of an event, etc.

Techniques

The majority of techniques used come from either watching countless video recordings of other musicians, but also the technique book “5 Movements are the Key: Venezuelan maracas method¹²” by Manuel Rangel. Within this book Rangel highlights five fundamental techniques to Venezuelan maraca playing, as well as musical examples of how to play them. I created my own summary of these techniques in a way that made sense for my application of them.

1. Staccato. Can be used to create single or multiple staccato sounds.
2. Scrape or Finite Legato. Achieved moving the maraca sideways and down. Longer sustained sound, but not sustainable for long.
3. Sustained Legato 1. This is done by holding the maraca perpendicular to the floor and rotating the forearm, creating a somewhat rhythmic but loud “roll” that can be sustained for lengths of time.
4. Sustained Legato 2. This is achieved by holding the maraca so the gourd is straight up towards the ceiling and spinning the gourd in a circle. This creates a much smoother and sustained legato sound than Legato 1.

By combining these techniques, I formed the basis for the vocabulary I would need for my improvisations.

¹² Manuel Rangel, *Five Movements are the Key: Venezuelan Maraca Method, Caracas, Venezuela 2017*.

Improvisation

My approach to improvisation in this piece begins in a very structured way, and “devolves” as the piece continues. In the first 190 measures I have outlined all of the rhythmic examples that I want to and am free to choose which ones I want to play. In between these moments, I often improvise in any number of ways, depending on the performance and what moves me in each instance. Many of these improvisations are based on the examples that Elvert has provided, but often I will sharply contrast them by straying from the prescribed examples. However, the majority of improvisations do not use any extended techniques outside of the five fundamental techniques listed above. As the piece goes on, I take greater liberties in my improvisations that do not always align with events in the backing track, adding more tension between the back track the maracas.

The Recording¹³

The piece begins without any maracas so the listener can hear the track and the first appearance of Figure 18 without me obfuscating it. I then decide in real time if I’m going to play the rhythm verbatim, which techniques I’m going to use and if I’m only going to play part of the example rhythms along with the track. When I switch to the cucumber shaker at 1:10, I still use the same technique as I would with a regular maraca and the staccato technique listed above. The resulting sound is much fuller, and I use it to expand the expected sound palette before switching to the Venezuelan maracas. I also want to make the transition to the next set of maracas as seamless as possible at 1:45 and do this by continuously playing the cucumber while I pick up

¹³Youtube recording: <https://youtu.be/5ZYYsjOykh8>

the next maraca and play the same patterns simultaneously to blend their voices together. I quickly have to switch to the matching maraca for measures 85-88. Here, I chose to showcase the scrape technique.

One of the most obvious events occurs in measure 101 when Elvert introduces a massive bass voice into the track. Here, I found the sustained legato 1 fitting to match the new sustained voice. The last event I keep close track of occurs in measure 191 (time stamp 4:48), when Elvert pulls the rug out from under us again and we are left with a new section with what appears to no sense of strict tempo. However, the time is still there and soon re-enters. Here, I switch to the second pair of maracas for more articulation. This allows me to play more involved and technically challenging rhythms with greater clarity than the previous pair.

While I am still following along with the measures in the score, I now care far less about playing with the events that occur and use the backing track as an accompanist to support my more soloistic performance. The final section of the piece begins at 7:13 where long sustained techniques take precedence over articulate rhythms. This is accomplished by almost exclusively using the sustained legato techniques. I begin switching between instruments to add contrasts and wait until I hear the final build from the track at 8:24 to begin my final crescendo until the end of the piece, which involves me fighting to maintain control of a final maraca roll until the track abruptly ends.

Chapter 6

Michizonaradosconsinsota

Inspiration

The title of this piece is derived from an amalgamation of all the states I have lived in. Starting with Michigan, I then moved to Arizona, Colorado, Wisconsin, and I now reside in Minnesota at the time of writing this paper and recording this project.

I presented Elvert with a unique challenge to give him inspiration in composing the backing track. I wanted to initially perform this piece at my lecture recital entirely off of a written road map, without any electronics. Once the recording of the lecture recital performance was complete, I sent a copy to Elvert, who used the recording as inspiration to compose the electronic backing track for the piece. This is not to say he manipulated sounds from the lecture recital, but rather, used the motives and structures he heard to create the backing track.

Instrumentation

The original ensemble for this piece involved a random number of percussionists and myself at the lecture recital. I gave the audience members no guidelines on what to bring other than “maracas and hand drums.” Once Elvert had created the backing track, I was inspired to completely change my original instrumentation. Performing as a soloist on the album recording, I still wanted to have a palette of sound available to me and I chose to create a drum set with some of the assorted non-western hand drums I own. My hand drum kit consists of a darbuka on my lap, a riq on a snare stand, a pandeiro on a snare stand, and a conga played with a bass drum

foot pedal on the floor (see figure 19)



Figure 19

In the second half of the piece, I was inspired to include an o-daiko drum. However, as I do not own one of these drums, nor do I expect future performers to have easy access to one, I opted for a larger kick drum on chair, and one played on the ground with a foot pedal.



Figure 20

Substitutions

The most obvious substitution would be for performers to use kick drums from a drum set in lieu of procuring or purchasing an o-daiko. However, a performer could also use a concert bass drum with ample muting, a large marching bass drum or floor tom from a drum set. The main goal is to have two large, low-pitched drums, with one being more resonant and the other slightly more articulate.

My hand drum kit was not created with the motivation of using the sounds of the drums I chose, but rather, it was an organic combination of the options available to me. If I had owned different instruments I would have created a different hand drum kit with different timbres, and therefore would have approached my performance completely differently. Performers are encouraged to create their own unique hand drum kits by simply being creative with the instruments to which they have access. In this way, each performance of this piece could be wildly different based on which instruments are selected, and how they are set up.

Performance Suggestions

Realizing the Score

For my lecture recital, I created a visual text-based road map for the audience to perform with me based on cues. The roadmap was:

- Intro: Mbira solo
- Cue 1: Time enters, sparse, player by player
- Cue 2: Melody exits, busier time

- Cue 3: Cued by maraca roll. all players fade out.
- Cue 4. All maracas roll
- Maracas time/trade solo
- Ben solo, others out

Once Elvert created the backing track based off of the group performance, we see a familiar occurrence. There is no written score of any kind and once again I needed to listen to the backing track and mark down specific events and when I heard them. I do not find this compositional style lazy. It reminds me of a chance-based performance where the composer releases their hold of the piece, allowing performers to take what they have created and make it uniquely their own. This of course necessitates that someone would most likely want to avoid performing this piece without enough time to listen and prepare their own score creation, but I believe the effort is rewarding in the realization of individualized performances.

Techniques

I do not use any sort of advanced techniques while playing the kick drum o-daiko substitute. For the hand drum kit, I use my thumb on the edge of the pandeiro to illicit a bass tone from the drum. The conga on the floor is struck with a foot pedal, and the mounted riq is primarily played with my fingertips on the edge of the drum to create a higher pitched and articulate sound. My darbuka playing uses the same split hand technique that I used when played tabla with my right hand.

Improvisation

My improvisation on the hand drum kit revolves around exploring the sounds of each drum. I'm not concerned about playing strictly in time, nor am I concerned about playing each

drum in a necessarily traditional way. I explore the sounds created on the darbuka by striking it with my knuckles and my palm on the shell of the drum, as well as lowering the pitch by placing my hand inside the shell of the instrument while playing the front. None of these exploratory improvisations rely on playing in time, as the track refrains from using any sort of pulse or meter until after the introduction.

Once time does enter into the improvisatory equation, I make an effort to keep my improvisations in tempo. I do not want “rhythmic dissonance” or totally unrelated rhythms between my own playing and the track.

The improvisation in the o-daiko/kick drum section of the piece does not have the benefit of multiple drums to create new ideas. Here, I implement different bass drum mallets to help change timbre and articulation. I begin the improvisations once again in my preferred method for this album — by starting with simpler ideas that gradually expand into more involved rhythms and phrases. I additionally use the shell and the rim of the kick drum to add sharply contrasting timbres against the sound of the bass head. My improvisation on the kick drum with the pedal is extremely limited in comparison to the kick drum mounted on chairs. I essentially only use the pedal to end phrases or add accents, and leave the greater improvisation to the bass drum mounted on chairs. Ultimately, I create greater and greater tension with my improvisation by increasing the intensity of my performance on the bass drums and gradually shift to ideas with greater space while decreasing volume as the recording nears the end.

The Recording¹⁴

My preparation and performance of this piece is influenced by my journey across the United States and evolves in the different sections of this piece. As I began my studies in music in Michigan, I was exploring different avenues of creating music - jazz band, world percussion, percussion ensemble, orchestra, marching band, etc. This concept of experimenting and trying new musical styles and ideas is exemplified in the beginning of the piece, with a very exploratory section. Between the start of the piece and when the backing track introduces a tempo at 2:36, I constantly move around each of the drums. Patterns that speed up and slow down are frequent, as are varying dynamics to explore as many different sounds out of each drum as possible — a musical representation of exploration. I include less common techniques, such as flicking the drum head of the riq at 1:26, or playing on the shell of the darbuka. I fade different voices in and out at 1:32, once again trying to emulate my shifting musical interests that would come and go as I tried different things.

When time finally enters into the track at 2:36, I see this as progression in my musical journey where I believe I have found a more straightforward path in my career. This is shown through my adherence to playing in strict time and limiting the earlier experimentations, such as playing on the shell of the drum, using my knuckles, etc. However, a new event occurs with the addition of a new tempo being introduced that conflicts with the previous one. A more aggressive, dissonant sounding tempo interrupts my journey at the 4:00 mark. To me, this juxtaposition of tempi indicates internal conflict with what I had previously considered to be the

¹⁴ Youtube recording: <https://www.youtube.com/watch?v=LYeqKma6tBM>

“correct path” I was on with my musical career and ideas. To emulate this, I have to immediately shift from the previous tempo to the new one, which is my allusion to trying to latch on to new ideas I had not previously had to think about or consider.

It is during this section that I travel over to the o-daiko/bass drum set up. I use these drums in my recording to emulate building internal conflict or confusion I experienced while trying to navigate the music world and my place in it. These doubts are shown through the increasing articulation of my bass drum mallets. I begin with a low underlying pulse with an extremely soft mallet at 4:23 - indicating persistent but distant doubts in the back of my mind as we traveled across the states, continuing to search for the “right place” to be. The frequency and volume continue to increase as the performance continues, as did many of my doubts.

At 5:08, I switch to a heavier mallet with a rubber head with my free hand, now holding one soft mallet and the new harder mallet. This creates a larger sound with more articulation - giving more accents between the generally consistent playing of the softer mallet. This indicates more pressing and poignant doubts or concerns - ideas that break to the forefront of my mind between the underlying cloud of doubts I could not necessarily put to words before. I include the kick drum pedal in this section as a second voice. This is done to showcase new concerns that I had not previously considered, and much like the harder bass drum mallet, exemplify clearer issues I now perceive. I also play on the bass drum rim here, to give sharp contrast with the sounds of the drum heads - even more thoughts coming to the forefront of my mind.

It is important to note that there was a mistake in the final recording. At 5:28, I drop my bass mallet while trying to flip it over and play with the opposite side. My original plan was to

flip this mallet over to increase articulation to help transition to the next section, but I fumble the flip and drop the mallet. This was not an issue in previous takes. However, Elvert and I decided to leave this in the final recording. In a practical way, this was the take of the piece that I felt had the best energy, and I am a full supporter of live recordings as opposed to making sure everything sounds perfect. As a performer, I cannot capture the spirit of a piece by recording fragments and sections of a work and stringing them together — I need to play the entire piece to flesh out the ideas in my improvisations. In a very fitting way, I ended up feeling that the error of dropping a mallet was extremely serendipitous, as it matched my musical journey. I made plenty of errors as I moved from state to state, but I forced myself to keep moving forward, and instead of making excuses about why a mistake occurred, I eventually learned that it was also wiser to not hide the mistakes, but accept the responsibility and continue on.

At 5:53, I transition to a harder wooden dowel in my left hand, and eventually match it with another dowel in my right hand. These new implements give the clearest articulation yet. From here until 7:55, I try to showcase when I had the greatest internal conflict with my career, academia, and the music industry as a whole, as the track also builds in tension. Bursts of aggression are frequent and build in intensity throughout this section, shown through sharp attacks on the shell and rim of the drum, bursts of fiery phrases, and increased tension. I was moved to physically showcase the turmoil I was trying to portray.

Finally at 7:55, Elvert rips away the building tension in the backing track creating a sudden focus. To me, this shows a sudden clearing of my mind as I try to focus on what is important now to me as a musician. I instantly stop my outbursts of malcontent and now try to create more space in the performance, indicating increasing clarity in my thoughts. This section

does not relinquish any of the bombastic dynamics, as I feel this section is indicative of a sort of cathartic process where emotions and tensions are being released. At 8:46, I begin an idea that alternates between the mounted kick drum and the pedal kick drum, beginning slowly and building in speed as I now transition back to the rubber and soft mallet. I then begin the process of gradually slowing down until the end of the piece, increasing the space between the notes. I found I was striking the drum with such catharsis that I needed to hold onto the rim to keep it from bouncing off the chairs! I gradually fade the drum back out into the dynamic that I started at — barely a whisper.

Chapter 7

Conclusion

This was an incredibly personal project for me in several ways. While having collaborated with Ryan in the past, our previous projects have only dealt with meticulously composed music. Commissioning and recording the different pieces for Synthetics involved my input far more than I anticipated, whether that be Elvert and I discussing the character of the piece or what we thought worked in the backing tracks. This allowed me to view his compositional process, from which I was usually removed. An added bonus was recording these commissions with him in my home state of Michigan, another place that is deeply personal to my upbringing as both a person and a musician.

The vast majority of this recording project allowed me to truly put a personal touch on each of the pieces via instrument selection and my approaches to improvisation. While there were aspects I tended to fall back on, there were also large sections of each piece that I performed differently each time. This organic approach to performance is an element I have fallen in love with, as it allows me to shape each new attempt into something unique. This is something unique that keeps me motivated as a performer. Each performance brings completely new possibilities and outcomes, which I find to be one of the most motivating aspects of improvisation. I anticipate that these commissions will continue to challenge my creative voice for years to come as staples of my repertoire.

With the option to substitute different instruments and improvise during each piece, musicians of diverse skill levels and backgrounds are able to convincingly perform these works

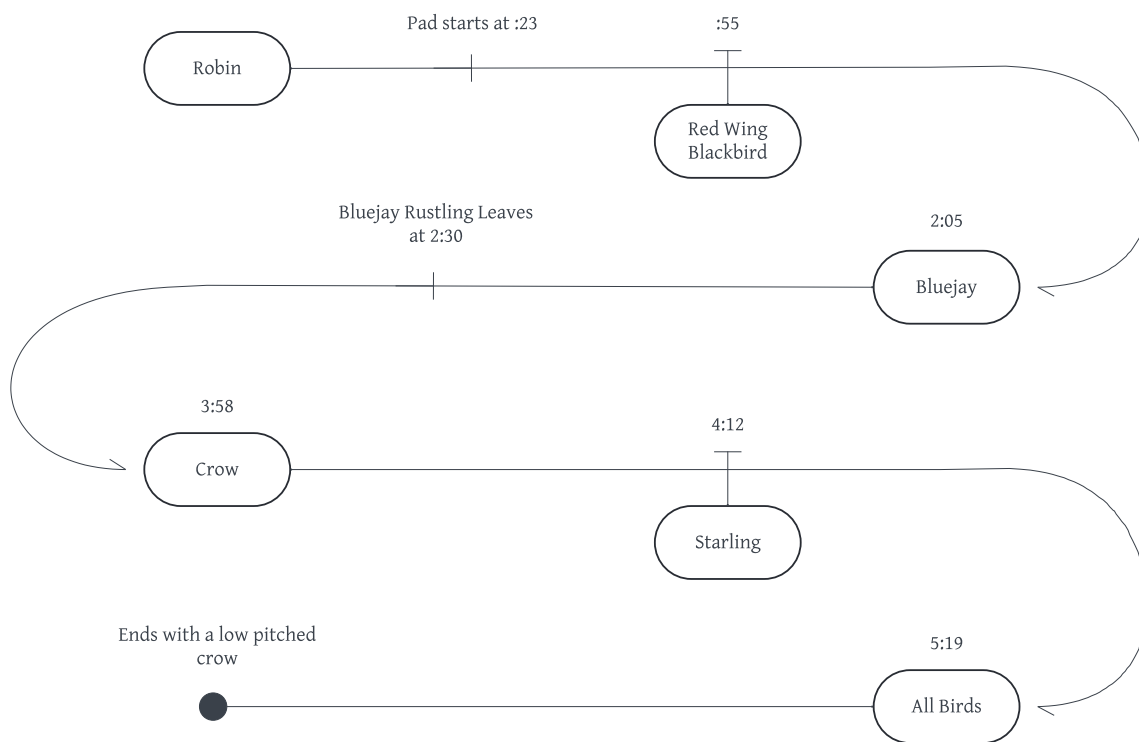
even if they don't own a bodhrán or Venezuelan maracas. It is my hope that by promoting these pieces through live performance and the online recordings, they will open doors and prove to be both challenging and fulfilling to musicians of diverse skill levels looking for an avenue to improvise and perform on a diverse set of non-Western instruments.

Appendix A

Birdlore

Birdlore

Ryan Elvert



Appendix B

Teibíocht

Teibíocht

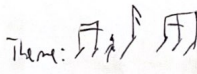
The image displays ten staves of musical notation for the piece "Teibíocht". Each staff begins with a treble clef and a time signature. The notation consists of a series of vertical bar lines on a horizontal line, with some staves containing additional numerical time signatures. The staves are numbered on the left side of the page.

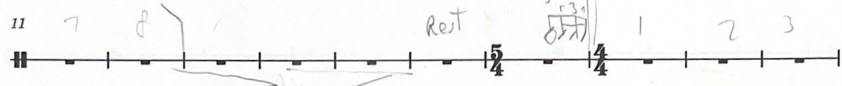

- Staff 1: Time signature $\frac{4}{4}$.
- Staff 2: Time signature $\frac{5}{4}$ followed by $\frac{4}{4}$.
- Staff 3: Time signature $\frac{3}{4}$ followed by $\frac{4}{4}$.
- Staff 4: Time signature $\frac{5}{8}$ followed by $\frac{4}{4}$, then $\frac{5}{8}$, $\frac{7}{16}$, and $\frac{5}{16}$.
- Staff 5: Time signature $\frac{4}{4}$ followed by $\frac{5}{8}$, $\frac{7}{16}$, $\frac{5}{16}$, and $\frac{3}{4}$.
- Staff 6: Time signature $\frac{4}{4}$ followed by $\frac{5}{4}$, $\frac{4}{4}$, $\frac{5}{8}$, $\frac{7}{16}$, and $\frac{5}{16}$.
- Staff 7: Time signature $\frac{4}{4}$ followed by $\frac{5}{4}$, $\frac{4}{4}$, $\frac{5}{8}$, $\frac{7}{16}$, and $\frac{5}{16}$.
- Staff 8: Time signature $\frac{4}{4}$.

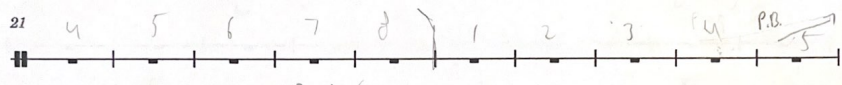

Appendix Image B2

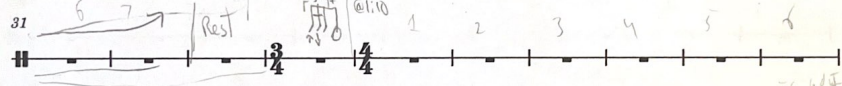

Teibíocht with Performance Markings

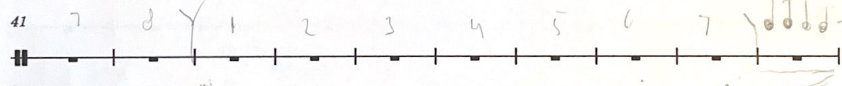
Teibíocht

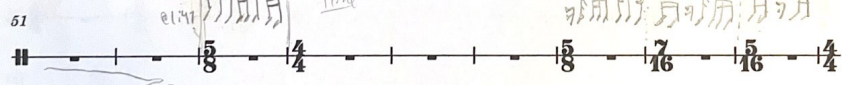
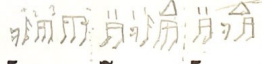
Theme: 



11  Rest  @:35

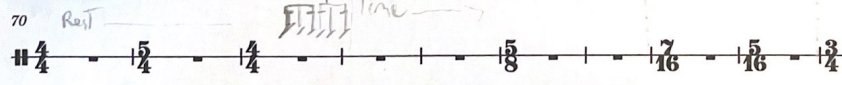

21  P.O. 

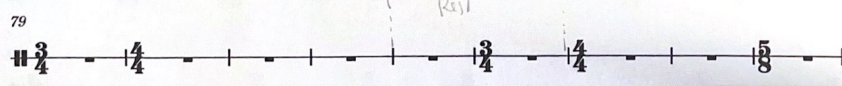
31  Rest  @:10

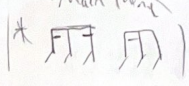
41  * Late M.M.C.

51  Time 

@:58 60  Time 

70  Rest  Time

79  Rest

Main Theme
* 

Appendix B3

Teiblocht with Performance Markings, Continued

2
88

97 *x* *Wol* *Tp* *Clav*

106

115 *x* *4^x* *2^x*

124 *1^x* *2^x* *2^x* *1^T*

133 *1^x* *1^T* *2^x* *1^T (x1)*

142 *Roll* *Roll* *Roll*

151 *Roll*

161

171

179 *Roll*

x = *T* =

T =

Appendix C

Water and Coffee Mbira Layout



Appendix D

Cage's *Internal* Score Excerpts and Annotations

Cage's Internal Map

Handwritten musical score for Hand Drum, titled "Cage's Internal Map". The score consists of ten staves, each representing a different time signature. The staves are labeled "Hand Drum" and "H. Dr." and contain various rhythmic notations, including vertical lines, stems, and brackets. Annotations include letters "A" and "B", and numbers such as 120, 126, 146, and 158. The time signatures are: 2/4, 6/4, 2/4, 2/4, 6/4, 2/4, 4/4, 6/4, 2/4, 4/4, 6/4, and 2/4. The score is written on a grid of dashed lines.

Appendix D2

Cage's Internal continued

2

Flow 1

H. Dr. 94

H. Dr. 106

H. Dr. 116

H. Dr. 126

H. Dr. 133

H. Dr. 143

H. Dr. 152

H. Dr. 160

H. Dr. 169

H. Dr. 179

H. Dr. 187

Appendix D3

Cage's Internal rhythmic examples

Maracas

Cages Internal

A
I can't understand why people are afraid of new ideas

A p (u, d)

3

B' 10 n r t

C 4

6

D

9

B
I'm afraid of the old ones

12

14

17

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